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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,977	05/22/2007	Helmut Fuchs	FUCH3004/FJD	8151
23364 7590 05/07/2009 BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314-1176				
EXAMINER KIRSCH, ANDREW THOMAS				
ART UNIT		PAPER NUMBER		
3781				
MAIL DATE		DELIVERY MODE		
05/07/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/576,977

**Applicant(s)**

FUCHS ET AL.

**Examiner**

ANDREW T. KIRSCH

**Art Unit**

3781

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 May 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date 4/24/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 11 and 15 are objected to because of the following informalities: claim 11 contains the term "said valve," claim 15 contains the term "said inner orifice" and the term "said annular bead," none of which are mentioned prior to those claims.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

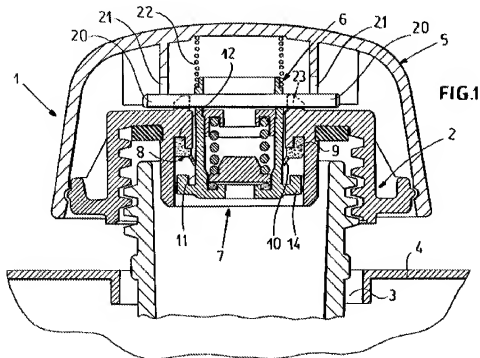
under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

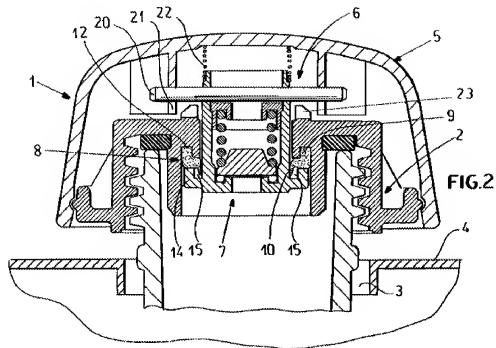
5. Claims 11-15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,941,407 (De' Longhi hereinafter) in view of U.S. Patent No. 5,886,266 (Stiller et al. hereinafter).

6. In re claim 11, with reference to Figs. 1 and 2 below, De' Longhi discloses: A closure cap (1) for a fixed neck of a container (4), in particular of a motor vehicle radiator, comprises: an outer cap part (5), said outer cap part having both a closure element for the container neck (2) and a grip element (outer surface of 5), rotatable relative to the container neck (column 2, lines 56-62); a torsion preventer (20); a pressure-controlled drive (7) in the form of a diaphragm (see Fig. 2); an inner cap part (11), said inner cap part having a sealing seat (9); a pressure-transmitting arrangement formed by an axial pressure-transmitting conduit (see Fig. 2) in the wall of said inner cap part (11), which wall receives said valve assembly (7); and a valve assembly (7), said valve assembly for uncovering and blocking a fluidic communication between the container interior and the container exterior, wherein: said torsion preventer (20) being located between said grip element (5) and said closure element (2), said torsion preventer being engaged via spring prestressing (spring 22) and disengaged via said pressure-controlled drive (7), and said valve assembly has an axially movable overpressure valve body (7), which is pressed toward the container interior against said

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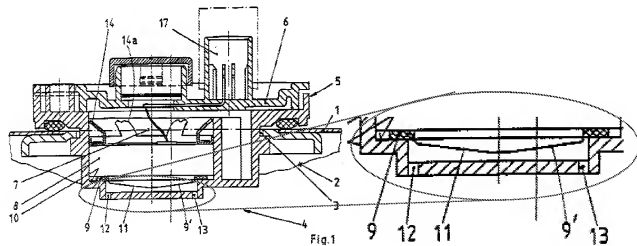
sealing seat with prestressing in such a way that if a limit value of the container interior pressure is exceeded, it can be lifted from said sealing seat, and an underpressure valve body (2 and 11 with one-way gasket 8) disposed concentrically to a cap axis and correspondingly activatable.





7. De' Longhi fails to disclose wherein the pressure-transmitting arrangement is formed by multiple axial pressure-transmitting conduits.

8. However, with reference to Fig. 1 below, Stiller et al. discloses multiple pressure-transmitting conduits (12 and 13) which communicate fluidically with the contents of a container.



9. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized multiple conduits as taught by Stiller et al. instead of the single conduit of De' Longhi for the purposes of providing a guard against damage to the valve from hard contents or to prevent large sediment from entering the valve.

10. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed ("motor vehicle radiator") does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

11. In re claim 12, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein said pressure-transmitting conduits (12, 13) are distributed uniformly over the circumference of the wall of said inner cap part (see Fig. 1 of Stiller et al. above).

12. In re claim 13, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein said one-piece diaphragm (see Fig. 2) on the outer circumference has an annular sealing edge, held in stationary fashion (by spring), and a centrally axially movable diaphragm plate, between which two diaphragm parts an annular bead (see Fig. 2) is provided.

13. In re claim 14, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein said sealing edge of said diaphragm is clamped in sealing fashion (by spring, see Fig. 2) between an annular face end of said inner cap (2) part and an annular edge of a diaphragm holder (see Fig. 2).

14. In re claim 15, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein said inner orifice of the pressure-transmitting conduits (12, 13) is located diametrically opposite said annular bead as combined herein. The term "diametrically opposite" is interpreted as having a part thereof on an opposite side of the center axis from one another as defined by the configuration of the claimed structure in Fig. 1 of applicant's disclosure.

15. In re claim 17, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein said torsion preventer (20) is formed by a cuplike element, between whose bottom and said diaphragm (see Fig. 2), on the one hand, a pressure disk (see Fig. 2) is disposed, and between whose bottom and said grip element, on the other, a compression spring (22) is disposed. Note that the term "cuplike" is being interpreted as "shaped as to contain an object therein," and the torsion preventer 20 clearly holds projections 23 therein in Fig. 2 of De' Longhi above.

16. De' Longhi in view of Stiller et al. fails to disclose a torsion preventer whose free edge is provided with coupling ribs, which are distributed over the circumference and point radially outward and which engage radial grooves of said grip element alone or of said grip element and the closure element of the outer cap part, depending on the axial position of the cuplike element.

17. De' Longhi in view of Stiller et al. rather shows the opposite configuration in which the coupling ribs are located on the grip element and the radial grooves are



located on the torsion preventer, and engage one another depending on the axial position of the cuplike element.

18. In re claim 18, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein said grip element is provided with an axially inward-protruding extension, which is engaged on the inside by the cuplike element.

19. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to switch the locations of the coupling ribs and radial grooves of De' Longhi in view of Stiller et al., since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. In re Einstein, 8 USPQ 167. Please note that in the instant application, page 3, applicant has not disclosed any criticality for the claimed limitations.

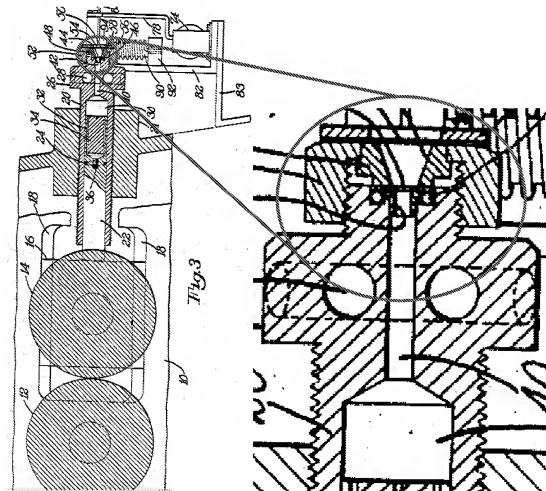
20. In re claim 19, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein the interior of said inner cap part (2), receiving said valve assembly (7), is covered by a fixed retaining plate (see Fig. 2).

21. In re claim 20, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein said underpressure valve body (2 and 11, with one-way gasket 8) is integrated axially centrally into said overpressure valve body.

22. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over De' Longhi in view of Stiller et al. as applied to claim 11 above, and further in view of U.S. Patent No. 2,686,930 (Norton hereinafter).

23. In re claim 16, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention except wherein said pressure-transmitting conduits are shaped conically, such that the smaller-diameter end forms said orifice toward the container interior.

24. However, with reference to Fig. 3 below, Norton discloses a hydraulic safety device wherein a valve body includes a conically shaped conduit (50) oriented with the smaller diameter towards the container interior (chamber 30).



25. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the shape of the conduits of De' Longhi in view of

Stiller et al. to be conical as taught by Norton for the purposes of tailoring the pressure at specific point in the case of liquid or air flow through the conduit as is common in the art.

### ***Conclusion***

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 5,540,347 to Griffin discloses a vent valve assembly for a storage tank with a spring-prestressed diaphragm and an overpressure valve. U.S. Patent No. 6,536,285 to Watanabe et al. discloses a pressure cap with a spring-prestressed diaphragm with over- and underpressure valve assemblies. Applicant is duly reminded that a complete response must satisfy the requirements of 37 C.F. R. 1.111, including: "The reply must present arguments pointing out the specific distinctions believed to render the claims, including any newly presented claims, patentable over any applied references. A general allegation that the claims "define a patentable invention" without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirements of this section. Moreover, "The prompt development of a clear Issue requires that the replies of the applicant meet the objections to and rejections of the claims." Applicant should also specifically point out the support for any amendments made to the disclosure. See MPEP 2163.06 II(A), MPEP 2163.06 and MPEP 714.02. The "disclosure" includes the claims, the specification and the drawings.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW T. KIRSCH whose telephone number is (571)270-5723. The examiner can normally be reached on M-F, 8am-5pm, Off alt. Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew T. Kirsch/  
Examiner, Art Unit 3781

/Anthony D Stashick/  
Supervisory Patent Examiner, Art  
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